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**Aspergillus kawachii alpha-amylase gene and transformant - for recombinant prodn. of acid-resistant, thermostable enzyme useful for direct saccharification of starch to produce alcoholic beverages**  
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Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7099979	A	19950418	JP 93265447	A	19930930	199524 B

Priority Applications (No Type Date): JP 93265447 A 19930930

Patent Details:

Patent No	Kind	LaN Pg	Main IPC	Filing Notes
JP 7099979	A	7	C12N-015/09	

Abstract (Basic): JP 7099979 A

The 2016 nucleotide sequence shown in the specification (coding for the alpha-amylase enzyme of *Aspergillus kawachii*) is new. More specifically, the sequence is cDNA synthesised from alpha-amylase mRNA of *A. kawachii* (IFO 4308) being contained in a *Saccharomyces cerevisiae* vector.

Also claimed is *S. cerevisiae* transformed with a vector as above and producing an alpha-amylase with the following properties: acid resistant at pH 2-7, 80% heat resistant at 60deg.C for 60 min. and degrades raw starch.

USE - The alpha-amylase enzyme, alcohol and alcoholic beverages can all be efficiently produced using the transformed yeast cells.

ADVANTAGE - The enzymes allows direct saccharification of starch for the prodn. of alcohol and alcoholic beverages.

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Title Terms: ASPERGILLUS; ALPHA; AMYLASE; GENE; TRANSFORM; RECOMBINATION; PRODUCE; ACID; RESISTANCE; THERMOSTABLE; ENZYME; USEFUL; DIRECT; SACCHARIFICATION; STARCH; PRODUCE; ALCOHOLIC; BEVERAGE

Derwent Class: D16

International Patent Class (Main): C12N-015/09

International Patent Class (Additional): C12N-001/19; C12N-009/28; C12N-015/09; C12R-001-66; C12R-001-865

File Segment: CPI

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